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EXAMINER

FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/621,687

**Applicant(s)**

HAMILTON, GRAHAM

**Examiner**

Jean B Fleurantin

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-40 are remained pending for examination.

***Response to Arguments***

2. Applicant's arguments filed on 12/19/02 with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 U.S.C. § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apte et al.

(US Patent No. 6,269,373)("Apte").

As per claims 1 and 19, Apte teaches a computer readable medium, operative to serve as a database interface, having instructions which when executed by a computer system (see col. 3, lines 51-55), as claimed comprise the following steps of receiving a database call at a computer system (thus, a Java client invokes a remote business method from an Enterprise JavaBean running in a cobra server; which is readable as receiving a database call at a computer system) (see col. 12, lines 40-42). Further, in column 6, lines 32 through 34, Apte teaches client object 400 may initiate calls to server object 402 to access database 404. But, Apte does not explicitly

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indicate mapping the database call to a general computer language programming call of a computer application; and executing the general computer language programming call to invoke functions of the computer application that correspond to functions specified by the database call. However, Apte implicitly indicates mapping references to a common object request broker architecture server containing an Enterprise JavaBean to back-end data store using primitive data types; which is readable as mapping the database call to a general computer language programming call of a computer application)(see cols. 16-17, lines 66-10); and client object 400 may initiate calls to server object 402 to access database 404 based on various business rules or business logic implemented within server object 402 database 404 may be located within the server or be a remote database, server object 402 may also provide access to current enterprise applications 410 and access to legacy applications 408; which is readable as executing the general computer language programming call to invoke functions of the computer application that correspond to functions specified by the database call)(see col. 6, lines 31-37). Further, in column 8, lines 11 through 16, Apte teaches client can transparently invoke a method on a server object which can be on the same machine or across a network, the object request broker intercepts the call and is responsible for finding an object that can implement the request pass it the parameters, invoke its method and return the results. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Apte with mapping the database call to a general computer language programming call of a computer application; and executing the general computer language programming call to invoke

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functions of the computer application that correspond to functions specified by the database call. This modification would allow the teaching of Apte to improve the accuracy of the database access bridge system and process, and provide a uniform application development model for tool creation use, and interoperability between various software applications (see col. 1, lines 40-41 and 56-57).

As per claim 2, Apte teaches the medium as claimed wherein said general computer language programming call is an Enterprise Java Bean (EJB) call (thus, Enterprise Java Bean (EJB) which is equivalent to an Enterprise Java Bean (EJB) call)(see col. 7, lines 25-27).

As per claims 3, 7, 23, 27 and 36, Apte teaches the medium as claimed wherein the database call is a Structured Query Logic (SQL) call (thus, structured query language database access interface, which is equivalent to database call is a Structured Query Logic (SQL) call)(see col. 6, lines 49-50).

As per claims 4 and 33, Apte teaches the medium as claimed wherein the computer system is an application server (see col. 12, lines 17-19).

As per claims 5 and 20, the limitations of claims 5 and 20 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claim 6, Apte teaches the medium as claimed further comprises generating a database call to a database in response to executing the general computer language programming call (thus, client object 400 may initiate calls to server object 402 to access database 404 based on various business rules or business logic implemented within server object 402; which is

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readable as generating a database call to a database in response to executing the general computer language programming call)(see col. 6, lines 32-36).

As per claim 8, Apte teaches the medium as claimed further comprises validating data operation prior to issuing the SQL call (see col. 6, lines 49-51).

As per claims 9 and 29, in addition to the discussion in claim 1, Apte further teaches steps of analyzing the components to determine the correspondence between the database elements and the elements of the components that access the database elements (thus, client object 400 may initiate calls to server object 402 to access database 404 based on various business rules or business logic implemented within server object 402 database 404 may be located within the server or be a remote database, server object 402 may also provide access to current enterprise applications 410 and access to legacy applications 408; which is readable as analyzing the components to determine the correspondence between the database elements and the elements of the components that access the database elements)(see col. 6, lines 31-37).

As per claims 10, 16, 22 and 40, the limitations of claims 10, 16, 22 and 40 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claims 11, 30 and 38, Apte teaches the medium as claimed wherein the computer programming language is object oriented and wherein said components are objects (thus, two Java beans may be employed that implement to client object 400 and server object 402; which is equivalent to wherein said components are objects)(see col. 7, lines 18-20).

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As per claims 12, 31 and 34, the limitations of claims 12, 31 and 34 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claims 13-15, A teaches the medium as claimed wherein the methods are identified by searching for a method of the form <command prefix>XXX (see col. 18, lines 61-65).

As per claims 17, 24-25, 28 and 39, Apte teaches the medium as claimed wherein said general computer programming language is the Java programming language (thus, the Java programming system which is an object-oriented programming system, object-oriented programming techniques involve the definition creation use and instruction of "objects"; which is equivalent to Java programming language)(see col. 6, lines 1-3).

As per claim 18, Apte teaches the medium as claimed wherein the database call received at the computer system is a first SQL database call and a column layout specified in the first SQL database call is different than a second SQL database call generated to a SQL database in response to executing the general computer language programming call (thus, two Java beans may be employed that implement the client object 400 and server object 402 what makes a bean different from a pure object is that it has an external interface called the properties interface, which allows a tool to read what the component is supposed to do and hook it up to other beans and plug it into another environment, two different types of beans may be used-JavaBeans and Enterprise JavaBeans (EJB), JavaBeans are intended to be local to a single process and are often visible at runtime; which is readable as computer system is a first SQL database call and a

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column layout specified in the first SQL database call is different than a second SQL database call generated to a SQL database in response to executing the general computer language programming call)(see col. 7, lines 18-24).

As per claim 21, Apte teaches the medium as claimed wherein said computer application is in a different computer programming language than said general computer programming language (see col. 7, lines 20-24).

As per claims 26 and 32, in addition to the discussion in claim 1, Apte teaches accessing said database using said selected one of said software components (thus, server object 402 may also provide access to current enterprise applications 410 and access to legacy applications 408; which is readable as accessing said database using said selected one of said software components) (see col. 6, lines 36-37). Further, in column 6, lines 46 through 51, Apte teaches Server object 402 contains the actual business logic that is implemented using application programming interfaces that utilize the Java-defined Java database connectivity structured query language database access interface which provides uniform access to a wide range of relational databases.

As per claim 35, the limitations of claim 35 are rejected in the analysis of claim 26, and this claims is rejected on that basis.

As per claim 37, the limitations of claims 37 are rejected in the analysis of claim 18, and this claim is rejected on that basis.



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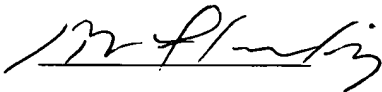
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Apte US Pat. No. 6,298,353 relates to a method and system for improved data processing systems, and more specifically to an improved data processing system which utilizes Java Beans or Java software applications.

***Conclusion***

5. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: *After Final* (703) 746-7238, *Official* (703) 746-7239, and *Non-Official* (703) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "***DRAFT***".

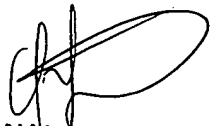
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.



Jean Bolte Fleurantin

March 4, 2003

JBf/



JEAN M. CORRIELUS  
PRIMARY EXAMINER